

Remarks

In view of the above amendments and the following remarks, allowance of the case is respectfully requested.

Claims 12-16 were previously canceled without prejudice, and claim 44 has been cancelled in the present response. No claims have been amended. Consequently, claims 1-11, 17-43 and 45 are currently pending and under consideration.

The applicants first wish to thank Examiner LeRoux for his assistance and comments during the telephonic interview of March 9, 2004. During the interview arguments were presented as to the allowability of selected independent and dependent claims over the references cited in the Office Action. For the Examiner's convenience, the arguments presented at the interview have been again provided below in the present response. Based on the Examiner's positive response to these arguments at the interview, it is believed that the application is in condition for allowance.

Background

To assist in the appreciation of the unique features of the present invention, some background information regarding the invention has been provided below. Organizations today are being swamped with questions from customers. Instead of using a telephone, however, more frequently these inquiries are being sent using alternate sources like web sites and emails. This can create a glut of online information requests that have to be processed by human beings. A customer service representative responding to such emails can be easily overwhelmed, and the responses to the requests may not be timely delivered. This can create dissatisfaction on the part of a customer, which in turn can lead to lost sales. Although automated systems provide quicker responses to questions, the results generated by the automated systems can be typically less accurate than answers from a human being. The client

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then may repeatedly ask the same question in different ways in an attempt to receive the desired answer from the automated system, and this can lead to frustration.

Detection of Repeated Question Messages

To alleviate this frustration associated with repeated questions, the knowledge-base system according to the present invention can detect repeated questions from a particular customer so that a human representative can be alerted to handle the question. As discussed in greater detail on page 33 and shown in FIG. 25, whenever a message is sent from the system, such as an email containing an answer to a question, the message contains a message identification number (1206 in FIG. 12) that is used to track the message. Upon receiving a message from a client, the knowledge base system (102) determines (stage 2502 in FIG. 25) if the message is a reply to the message that was previously sent from the knowledge-base system by determining if the message contains the message identification number (1206). If so, the message is then forwarded to be processed by a representative (stage 2506). If no message identification number (1206) is detected, the message may still be a reply, because some email systems delete the original message when a reply is sent. To remedy this problem, the knowledge-base system maintains a message (communication) log. The message log can contain information such as the email address, the original question in the email, and the date/time the message was sent. One or more of these parameters can be used to determine whether a message is a reply (stage 2510). For example, in one embodiment, the time interval between messages is used to determine if a message is a reply. If a reply is detected based on the parameters, then the message is forwarded to the appropriate representative. Otherwise, the message is automatically processed by the knowledge-base system (stage 2510), and the response is automatically sent to the requesting client.

Grading Answers and Questions Differently

To reduce the accuracy problems associated with answers generated by automated systems, the knowledge-base system according to the present invention is configured to separately index questions and answers so as to improve the accuracy of the automatically generated answers to questions. The knowledge-base system (102) stores answers to questions in a database (108). An example of a single question-answer database table (600) is shown in FIG. 6; where each line represents a different question-answer (Q/A) entry. For each Q/A entry, the table (600) includes a Q/A entry identification number field (602), which is used to identify individual Q/A entries. The table (600) also includes a question field (604) and a corresponding answer field (606) for each Q/A entry. The database (108) further includes a word index for locating words in the question-answer table (600). For example, an index applicable to the single table arrangement of FIG. 6 is depicted as the word index table (700) in FIG. 7. The index 700 contains an index of specific words (and/or phrases) and their locations within the database (108). In the FIG. 7 representation, a different word is indexed in each line, and each line of the index (700) includes word field (702), Q/A entry identification field (704), question statistic field (706), and answer statistic field (708). For each line, the individual indexed (cataloged) words appearing in Q/A entries are stored in the word field (702). The Q/A entry identification number (404, 602) for the Q/A entry in which the word appears is stored in a Q/A entry identification field (704). For example, as shown in FIG. 7, the word "system" is present in Q/A entry number "100" and Q/A entry number "204." For each Q/A entry in which the indexed word appears, there is a question statistic field (706) and an answer statistic field (708). These fields (706, 708) each contain a grade or statistic pertaining to the indexed word relative to its appearance in the respective question or answer part of the corresponding Q/A entry. These separate statistic fields (706, 708) allow the question and answer fields to be individually graded and indexed. A grade can represent the number of occurrences of the indexed word in the question or answer field of the corresponding Q/A entry, the designated weight or importance of an

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indexed word for the particular Q/A entry to be given during matching, and other types of grading (statistical) information.

Referring to FIG. 10, when asking a question a client can specify that questions and answers to be graded differently during the selection process. As shown, the screen (100) in FIG. 10 has a question weight field (1010) and an answer weight field (1012) to enter these different weighting factors. An additional relative weight field (1014) is included to define a proportional relationship between the question and answers during querying. Because under certain circumstances the words in questions may generate more or less accurate results than those contained in the answers, it is desirable to grade question words differently than answer words in some embodiments. In other circumstances where the words in answers may generate more or less accurate results than those contained in the questions, it would be desirable to grade question words differently than answer words. By having separate grading for the question and answers in the word index table (700) of FIG. 7, the question and answer fields can be independently graded based on the index table (700) and/or client weighting inputs (1008), as is depicted in FIG. 10. By grading index questions and index answers differently, the accuracy of the automatically generated answers to questions improves.

Dynamic Threshold Limits

To further improve accuracy in automatically generating answers to questions, the knowledge-base system (102) further utilizes dynamic threshold limits when selecting answers to questions. As discussed on pages 24-25 of the present application, upon receiving a question, the knowledge-base system (102) queries the database (108) in order to find Q/A entries relevant to the question. For example, the knowledge-base system (102) via a matcher (106) can use the word index (700) of FIG. 7 and the question-answer table (600) of FIG. 6 to generate a response. Each matching Q/A entry is scored based upon the values contained in the question statistic field (706), the answer statistic field (708), and the relative weighting designated by

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the client (or predesignated by the administrator) in the question-answer weighting inputs (1008) of FIG. 10. For example, the question weight field (1010) can be multiplied by the question statistic (706) to generate a question score for each Q/A entry, and the answer weight field (1012) can be multiplied by the answer statistic field (708) to generate an answer score for each Q/A entry. The mean, standard deviation, sample standard deviation and other statistical variables for the population of all Q/A entry score are then calculated. Based on these statistical measurements, grades are calculated for the Q/A entries. The knowledge-base system creates and selects the results based upon a desired threshold level for these grades. Both an absolute threshold that applies equally to all questions and a dynamic threshold level that is determined for each question are used to filter the results. Only Q/A entries with scores that satisfy both the absolute and dynamic threshold levels will be included in the results. In one embodiment, the dynamic threshold level is set to a multiple of standard deviation units of all scores greater than the calculated mean of all scores. The results containing all Q/A entries having scores above the threshold levels are selected. For example, if the dynamic threshold level was two standard deviation units, then only Q/A entries with scores greater than two standard deviation units above the mean score would be selected. This technique addresses many problems inherent in thresholding schemes based upon a fixed score, particularly problems related to choosing an appropriate threshold level.

Reflexive Index

A reflexive querying technique according to the present invention also helps to improve the accuracy of a query. As illustrated in FIG. 26 and described on page 26, the knowledge-base system 102 receives a question (stage 2602), and generates a candidate set of query results (stage 2604). This query result set includes the Q/A entries that most closely match the question asked. The knowledge-base system creates a temporary "reflexive" index (answer candidate index) (stage 2606). This temporary index includes the original question and either all of the Q/A entries in the

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database or only the candidate sets of query results. In one embodiment, the temporary reflexive index includes the original question and all of the Q/A entries in the database. The temporary index, which now contains the original question, is queried using each of the question fields from the candidate answers (from stages 2604 2610), the results from this query are correlated and graded with respect to the original question. Only those candidate entries that, when queried against the temporary reflexive index, hit the original question are included in the response to the question. Thus, this technique helps to reduce the number of "false positive" results returned by eliminating candidate Q/A entries that do not "reflexively" ("symmetrically") match the question.

Independent Claim 1

In item 2 of the Office Action, independent claim 1 was "rejected under 35 U.S.C. 102(b) as being anticipated by SU [sic.] Pat No 5,517,405 issued to McAndrew et al (hereafter McAndrew '405)." It is well settled law that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference in as complete detail as is contained in the claim. In traversal, the Applicants submit that McAndrew '405 does not disclose the invention set forth in the claims.

As discussed at the interview (and in the previous response), McAndrew '405 fails to disclose "determining the message from the client computer was a reply to a previously generated message from the knowledge-base system" and "forwarding the message from the client computer to a representative in response to said determining" as is recited in claim 1. As should be readily appreciated from the discussion above (under the "Detection of Repeated Question Messages" section), independent claim 1 concerns a technique for detecting repeated messages in which it is determined that a message was a reply to a previously generated message from the knowledge-base system, and in response to this determination, the message is forwarded to a representative. As discussed above, this technique reduces the frustration associated

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with submitting repeated questions to an automated system in an attempt to obtain an adequate answer to a question. Nowhere does McAndrew '405 disclose these above-mentioned features recited in claim 1.

Under the "First Examiner Response" section on page 14 of the Office Action, it was alleged that "[i]n response to the applicant's arguments that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., forwarding a referral to a reviewer) are not recited in the rejected claims." To the contrary, it is believed that the arguments provided in the previous response specifically addressed the recited features missing from McAndrew '405. In particular, it is believed that page 12, lines 13-17 of the previous response might have been overlooked, in which it was stated that "McAndrew '405 fails to disclose 'determining the message from the client computer was a reply to a previously generated message from the knowledge-base system' and 'forwarding the message from the client computer to a representative in response to said determining' as is recited in claim 1." The ensuing discussion of these omitted features in the previous response were discussed in terms of the language used in McAndrew '405 so as to aid in the understanding of how McAndrew '405 did not disclose these features recited in claim 1. For example, it was believed where the previous response stated at page 13, lines 1-4 that "nowhere does the passage explicitly state that the expert system of McAndrew '405 actually forwards a referral to a reviewer" one would understand that the "forwarding the message from the client computer to a representative" feature was being discussed.

To reiterate one of the points presented at the interview, nowhere does McAndrew '405 disclose "determining the message from the client computer was a reply to a previously generated message from the knowledge-base system." In the Office Action, it was alleged that, column 8, lines 6-16 of McAndrew '405 disclosed this feature. However, a careful reading of this passage shows that, in the system of McAndrew '405, there is no need for that system to determine whether or not a question was a reply to a previously generated message from the system. In

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McAndrew '405, the system is interacting with only a single user at a time and for a continuous period of time. That is, the user's queries are not interrupted by queries from other users about other things. So, in the McAndrew '405 system, there is no need to determine if a message was a reply to a previously generated message, and thus, the problem addressed with claim 1 simply does not exist in the environment envisioned by McAndrew '405. For this and other reasons, McAndrew '405 fails to disclose or even suggest "determining the message from the client computer was a reply to a previously generated message from the knowledge-base system" as is recited in claim 1.

Also, as discussed at the interview and in the previous response, McAndrew '405 fails to expressly or inherently disclose "forwarding the message from the client computer to a representative in response to said determining." In the Office Action, it was alleged that, column 8, lines 38-49 of McAndrew '405 disclosed this feature. It should be appreciated after reading this paragraph that nowhere does the passage explicitly state that the system of McAndrew '405 actually forwards a message to a representative in response to a determination that the message was a reply to a previously generated message from the system. Moreover, there is no inherent disclosure of this missing feature because this missing feature was not necessarily present in McAndrew '405. At most, the McAndrew '405 system merely makes a recommendation of a referral, and it does not actually forward a message. For this and other reasons, McAndrew '405 fails to disclose "forwarding the message from the client computer to a representative in response to said determining."

Since McAndrew '405 fails to disclose "determining the message from the client computer was a reply to a previously generated message from the knowledge-base system" and "forwarding the message from the client computer to a representative in response to said determining" as recited in claim 1, it does not anticipate claim 1. It therefore is submitted that independent claim 1 and its dependent claims are allowable over the references of record.

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Dependent Claims of Claim 1

In addition to the reasons given above as to the allowability of independent claim 1, other reasons support the allowance of its dependent claims. For example, McAndrew '405 fails to disclose "enclosing a message identification number on all communications sent by the knowledge-base system; and wherein said determining includes searching the message from the client computer for the message identification number" as recited in dependent claim 3 (emphasis added). As discussed above in the "Detection of Repeated Question Messages" section, a message identification is attached to a message so that the knowledge-base system is able to determine whether or not a received message is a reply to a message that was previously sent from the knowledge-base system. The passage cited in the rejection of claim 3 (McAndrew '405, column 6, lines 47-58) is silent with respect to enclosing a message identification number on a communication, such as a message, and further, it is silent as determining that a message was a reply by searching the message for the message identification number. Thus, McAndrew '405 fails to anticipate dependent claim 3.

In another example, McAndrew '405 fails to disclose all of the features recited in dependent claim 5 such as "wherein said determining includes ascertaining with the communication log whether a reply detection limit has been exceeded for the client computer." Moreover, McAndrew '405 fails to disclose "wherein the reply detection limit includes a communication interval limit of time intervals between successive communications with the client computer and a number of communications limits based on a number of communications with the client computer" as recited in dependent claim 6. As should be appreciated from the discussion above, claim 6 concerns the feature in which the knowledge-base system maintains a communication log in which the time interval between messages is used to determine whether or not a message is a reply to a message that was previously sent by the system. The passage of McAndrew '405 cited in the Office Action is completely silent as to using the time interval between messages to determine if a message is a reply message. Moreover, McAndrew '405 says nothing (either in Column 6 or in Columns 9-10) about using the

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time intervals between successive communications in any aspect of its system. Thus, claims 5 and 6 are not anticipated by McAndrew '405.

Independent Claim 17

In item 2 of the Office Action, independent claim 17 was "rejected under 35 U.S.C. 102(b) as being anticipated by SU [sic] Pat No 5,517,405 issued to McAndrew et al." To support the rejection, the Office Action alleges that the following passage (column 10, lines 23-27) of McAndrew '405 discloses that "question and answers are evaluated differently":

The inference engine uses the answers to the questions, as indicated via dashed arrow 82, to generate additional questions for display to the user. In this manner, a complete questionnaire is dynamically built and answered to enable the inference engine to make a recommendation as to the acceptability of the proposed treatment.

Contrary to this assertion, it is submitted that McAndrew '405 fails to disclose a number of features recited in claim 17. For instance, McAndrew '405 fails to disclose or suggest "receiving a query input to the system, the query input including a word" and "selecting one or more of the question-answer sets with the system in response to the query input by evaluating presence of the word in one or more answers of the question-answer sets differently than presence of the word in one or more questions of the question-answer sets" as recited in claim 17. It should be appreciated from the discussion above that claim 17 concerns a technique for selecting question-answer sets in response to a query input that includes a word. In particular, the presence of a word in answers of question-answer sets is evaluated differently from the presence of the word in questions of the question-answer sets (see, "Grading Answers and Questions Differently" section). As discussed during the interview, nowhere does McAndrew '405, especially in the above-cited passage, expressly mention that the presence of a word in questions and answers of question-answer sets are evaluated differently during selection of one or more of the question-answer sets. Specifically, McAndrew '405 in the column 10 fails to expressly mention how the

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additional questions are generated. It seems selected features from claim 17 are being ignored and/or glossed over, and further, McAndrew '405 is being read out of context. The cited passage of McAndrew '405 concerns a "structured interaction" in which additional questions are selected based on rules contained within the system. Referring to column 10, lines 7-27, the McAndrew '405 system questions are presented to the user one or more at a time. The system receives answers to the questions from the user. Assuming for arguments sake that the answers from the user correspond to the recited "query input", then the "answers" in the cited passage do not correspond to the answers of a "question-answer set."

Moreover, McAndrew '405 does not inherently disclose evaluating questions and answers of question-answer sets differently because it is not a necessary consequence the McAndrew '405 system evaluates questions and answers of question-answer sets differently. It is quite conceivable, and in fact most likely, that the McAndrew '405 system uses a rules based technique in which neither questions nor answers of question-answer sets are evaluated for the presence of a word. Rather, a "structured interaction" can be used in which "individual questions relevant to the problem are presented by the inference engine as indicated at box 72 based on rules contained in the database"(column 10, lines 9-11, emphasis added). "The structured model provides formatted questions with branching logic tables and/or an array that will lead the user to a set decision based on the answers to the questions presented" (column 3, lines 9-12). Even with a "guided model" McAndrew '405 fails to mention that questions and answers in question-answer sets are evaluated differently. Rather, it is conceivable that both questions and answers are evaluated the same in the "guided model." Since McAndrew '405 fails to disclose "receiving a query input to the system, the query input including a word" and "selecting one or more of the question-answer sets with the system in response to the query input by evaluating presence of the word in one or more answers of the question-answer sets differently than presence of the word in one or more questions of the question-answer sets", it is submitted that McAndrew '405 fails to anticipate claim 17. For this and other reasons, it is submitted

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that independent claim 17 and its dependent claims are allowable over the references of record.

Dependent Claims of Claim 17

In addition to the reasons given above as to the allowability of independent claim 17, other reasons support the allowance of its dependent claims. In item 7 of the Office Action, claims 18 and 19 were "rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew '405 in view of Pub No US 2003/0050803 to Marchosky (hereafter Marchosky '803)." In traversal, it is submitted that both McAndrew '405 and Marchosky '803 fail to disclose "wherein said evaluating includes weighting the answers more than the questions" as recited in claim 18. As should be appreciated from the discussion above, claim 18 concerns a technique in which question-answer sets are selected by weighting the answers in the question-answer sets more than the questions in the question-answer sets. In item 7, it was admitted that "McAndrew '405 does not disclose weighting the answers more than the questions." As pointed out at the interview, Marchosky '803 fails to remedy this missing feature because Marchosky '803 does not disclose the relative weighting of questions to answers (or vice versa), but instead the relative weighting of questions to other questions. Indeed, the system and purpose described in paragraph 14 of Marchosky '803 is very different from the technique recited in claim 18, and it makes no mention of the weighting of answers at all, especially when selecting question-answer sets. Since both McAndrew '405 and Marchosky '803 fail to disclose "wherein said evaluating includes weighting the answers more than the questions" as recited in claim 18, claim 18 is not rendered obvious in view of these references. Likewise, based on the discussion above, it should be appreciated that claim 19 is not rendered obvious by the combination of McAndrew '405 and Marchosky '803 because both references fail to disclose "wherein said evaluating includes weighting the answers less than the questions" as recited in claim 19.

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Independent Claim 34

Independent claim 34 was rejected "rejected under 35 U.S.C. 102(b) as being anticipated by SU [sic.] Pat No 5,517,405 issued to McAndrew et al" in item 2 of the Office Action. As will be appreciated from the discussion below, McAndrew '405 fails to disclose a number of features recited in claim 34 such as "scoring the question-answer sets with respect to the question; determining a threshold limit based upon said scoring; and selecting the question-answer sets with scores above the threshold limit." As should be appreciated from the discussion in the above "Dynamic Threshold Limits" section, independent claim 34 generally concerns a technique in which question-answer sets are scored with respect to a question, a threshold limit is determined based upon the scoring of the question-answer sets and the question-answer sets with scores above the threshold limit are selected. On page 16 of the Office Action, it was alleged without further explanation that the "disclosure by McAndrew '405 column 8, lines 17-26 reads on the claimed threshold limit." Since no explanation was given as to what specifically in this passage corresponds to the recited threshold limit, it has been assumed for arguments sake that it is being alleged that the "policy coverage" corresponds to the recited threshold limit. However, based on the language of claim 34 the "policy coverage" cannot correspond to the threshold limit. First, the above-cited passage of McAndrew '405 fails to even mention that question-answers sets are scored with respect to a question that was received. Second, McAndrew '405 fails to disclose that a threshold limit is determined based upon the scoring of the question-answer sets. The policy coverage in McAndrew '405 is a static value stored in database 42 (insurance information 48) that is no way based on scoring of question-answer sets. Because McAndrew '405 fails to disclose "scoring the question-answer sets with respect to the question; determining a threshold limit based upon said scoring; and selecting the question-answer sets with scores above the threshold limit", McAndrew '405 fails to anticipate claim 34. For this and other reasons, it is submitted that independent claim 34 and its dependent claims are allowable over the references of record.

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Independent Claim 39

In item 12 of the Office Action, independent claim 39 was "rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew '405 in view of US Pat No 5,779,549 issued to Walker et al (hereafter Walker '549)." In traversal, the Applicants submit that a *prima facie* case of obviousness has not been established because there has been shown no teaching, suggestion or motivation to modify the cited reference in the manner that has been asserted to arrive at the invention recited in claim 39. In particular, the cited references, even in combination, fail to disclose or suggest all of the features as recited in independent claim 39. For example, both references fail to disclose "selecting one or more candidate sets from the question-answer sets based on the question from the client computer; creating a reflexive index that includes the question from the client computer and at least the candidate sets; scoring each question from the candidate sets against the reflexive index; scoring the question from the client against the reflexive index to generate a question score; and choosing the candidate sets with scores that correlate with the question score" as recited in claim 39. As should be appreciated from the discussion above, claim 39 concerns a technique of choosing question-answer sets from a set of candidates by utilizing a reflexive index. The reflexive index includes a question from a client computer and candidate sets of question-answer sets that were selected based on the question. Both the questions from the candidate sets and the question from the client computer are scored against the reflexive index. Candidate sets of question-answers that correlate with the score of the question are chosen. As noted above, this technique helps to reduce the number of false positive results returned by eliminating candidate question-answer sets that do not symmetrically (reflexively) match the question.

Under the "Fifth Examiner Response" section on page 16 of the Office Action, it was asserted that the applicants in the previous response were "attacking references individually where the rejections are based on combinations of references." However, as discussed at the interview, it is submitted that the applicants were not attacking the

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cited references individually because both cited references are missing the above-mentioned features recited in claim 39. Specifically, in the previous as well as the present Office Action, it was admitted that "McAndrew '405 does not disclose creating a reflexive index that includes the question from the client computer and at least the candidate sets; scoring each question from the candidate sets against the reflexive index; scoring the question from the client against the reflexive index to generate a question score; and choosing the candidate sets with scores that correlate with the question score" as recited in claim 39. From the discussion of Walker '549 on pages 15-16 of the previous response, it should be easily appreciated that Walker '549 does not remedy the situation because Walker '549 likewise does not disclose the features that were admitted to be missing from McAndrew '405.

To reiterate the arguments presented in the previous response and at the interview, although Walker '549 uses the term "[r]eflexive" when describing its software at column 13, lines 32-33, that is where the similarities between claim 39 and Walker '549 end. About the only commonality between claim 39 and Walker '549 is that they use the word "reflexive", but their use of the word "reflexive" is used in an entirely different context. Walker '549 fails to disclose "creating a reflexive index that includes the question from the client computer and at least the candidate sets." It seems that the "reflexive software" in Walker '549 is used to adjust the difficulty levels of game questions based on the skill level of the player. "[T]he difficulty of subsequent questions is based on the accuracy rate achieved on prior questions" (Walker '549, column 13, lines 35-37). Walker '549 fails to describe how, or even if, any type of index is created, let alone if the index includes a received question along with candidate question-answer sets that might answer the received question. Moreover, Walker '549 fails to disclose "scoring each question from the candidate sets against the reflexive index; scoring the question from the client against the reflexive index to generate a question score; and choosing the candidate sets with scores that correlate with the question score" in the manner recited in claim 39. As should be appreciated, Walker '549 does not score or choose in such a manner. Since both

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McAndrew '405 and Walker '549 fail to disclose "selecting one or more candidate sets from the question-answer sets based on the question from the client computer; creating a reflexive index that includes the question from the client computer and at least the candidate sets; scoring each question from the candidate sets against the reflexive index; scoring the question from the client against the reflexive index to generate a question score; and choosing the candidate sets with scores that correlate with the question score" as recited in claim 39, claim 39 is not rendered obvious in view of these references. For this and other reasons, it is submitted that claim 39 and its dependent claims are in condition for allowance.

Independent Claim 41

In item 4 of the Office Action, claim 41 was "rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew '405." In traversal, the Applicants submit that claim 41 is not rendered obvious by McAndrew '405 because it fails to disclose a number of features recited in claim 41. As discussed at the interview McAndrew '405 fails to disclose "means for determining a message from a client computer was a reply to a previously generated message from a FAQ database and forwarding the message to a representative in response." This feature concerns means in which it is determined that a message was a reply to a previously generated message, and as a result, the message is forwarded to a representative. It should be appreciated from the above discussion that the expert system in McAndrew '405 does not forward a message to a representative when it is determined that the message was a reply to a previously generated message from the system.

Moreover, McAndrew '405 fails to disclose "means for evaluating question components and answer components of the FAQ database independently relative to an input query." As noted above, McAndrew '405 fails to expressly disclose that questions and answers are evaluated independently from one another in its expert system.

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The applicants again traverse the use of Official Notice with respect to independent 41 and respectfully request that documentary evidence be provided to support the cited contention. Without citing a specific reference, the present and previous Office Action stated that "Official Notice is taken that means for providing a response to the FAQ database query in accordance with one or more response templates, the response templates each relating to a different response format is well-known and expected in the art." The applicants traversed the use of Official Notice in the previous response. In response to this traversal, on page 18 of the current Office Action, it was maintained "that a FAQ database is well-known and expected in the art." However, this contention still fails to explain how the response templates are well known in the art and why the traversal was inadequate. As stated at §2144.03 of the Manual of Patent Examining Procedures 8th Edition ("MPEP"), "[i]f the traverse was inadequate, the examiner should include an explanation as to why it was inadequate." Moreover, "[a]ny rejection based on assertions that a fact is well-known or is common knowledge in the art without documentary evidence to support the examiner's conclusion should be judiciously applied." MPEP §2144.03. One of the reasons behind applying this type of notice judiciously is because the inherent unfairness of having an applicant argue against an imaginary reference. Again, it is submitted that the taking of Official Notice for independent claim 41 was not made to merely fill gaps that are of insubstantial in nature, and if such a feature were as well known as alleged, it should not take great effort to locate a document that supports this contention. Therefore, if the rejection of claim 41 is maintained, it is requested that documentary evidence supporting the Official Notice be provided.

Since the cited references fail to disclose "means for determining a message from a client computer was a reply to a previously generated message from a FAQ database and forwarding the message to a representative in response" and "means for evaluating question components and answer components of the FAQ database independently relative to an input query", it submitted that claim 41 and its dependent claims are in condition for allowance.

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Conclusion

Once again the applicants wish to thank the Examiner for the guidance provided at the interview. In view of the Examiner's positive comments at the interview, it is submitted that the present application is now in condition for allowance, and the Examiner is requested to pass the case to issue. It should be understood that the above remarks are not intended to provide an exhaustive basis for patentability or concede the basis for the rejections in the Office Action, but are simply provided to overcome the rejections made in the Office Action in the most expedient fashion. If the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact the applicants' undersigned representative.

Respectfully Submitted,

By 

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